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# ALLOCATING THE GROUNDWATER POLLUTION TASKS: A COMMENT

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Until quite recently, pollution control in the United States has largely been one grand shell game. We have dealt with pollution issues one at a time, and in doing so have more or less encouraged polluters simply to shift their pollution from one place to another. In many ways the ground is the last shell and it is covering much of our pollution. When this last shell is finally turned up, a new age must and will begin.

The entire process of moving pollution around has such old roots that it is by now a time-honored and venerable custom. In seventeenth-century America the English colonists tossed their garbage out beside their homes, trusting that animals and decay would cart it away. As sensibilities increased this garbage became a type of pollution, and a new approach was needed. The approach chosen was simple: toss the garbage into an abandoned well, and when the well is full, find another one.[1] This change would later delight historical archeologists, for old wells are rich in artifacts. But the new practice set a bad and contagious precedent. When we do not want pollution under one shell, we switch it with another.

Earlier in this century, smoldering garbage dumps came under attack because they generated air pollution. The shell game by then was well known, and the solution to open-pit incinerators was simply to stop the fires, bury the garbage, and thereby make the dump "sanitary." When neighbors around factories became concerned about local ambient air quality, the polluters also knew what to do: build tall smoke stacks so that their emissions went higher into the sky and polluted the air in some other neighborhood.

These examples illustrate a common practice. Both air and surface water pollution face stiff controls, and many polluters now rid their wastes in dumps and underground injection wells. Smokestack scrubbers remove pollutants from the air, but the pollutants do not suddenly disap-

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1. *See* J. DEETZ, IN SMALL THINGS FORGOTTEN: THE ARCHAEOLOGY OF EARLY AMERICAN LIFE 125-26 (1977).

pear. Pollutants that no longer rise into the air still go somewhere, and that somewhere is likely to be in the ground, where they often move, slowly and inexorably, to mingle with groundwater. Even our Superfund clean-up efforts largely involve moving toxic substances from one place to another, rather than transforming the chemicals into something no longer hazardous—a more difficult if not impossible task.

As Professor Getches tells us, the ground beneath our feet has long been a shell that few people wanted to touch, in part because it is hard as a technical matter to see what is under it, but in part as well out of fear for what we would find.[2] Controlling groundwater pollution will be a big job for many reasons, but the biggest reason, by and large, is that the ground is our last shell.[3]

## I.

In his essay Professor Getches offers us a thoughtful analysis of how we might go about allocating the groundwater pollution control tasks between the state and federal governments.[4] He brings to this topic a considerable amount of experience as a top-level state administrator and years of reflection as a legal scholar. If he brings to the topic a Westerner's distrust of most things federal (except federal money), he does so largely because his own administrative record (as former Executive Director of the Department of Natural Resources) and that of his state (Colorado) give him reason to be proud. His preference for state over federal leadership makes all the more sense after a full decade of federal smoke and procrastination. His study deserves wide circulation.

Getches makes several points. The issue, he tells us, is not a question of either-or; there is plenty of room for action by both federal and state governments.[5] The federal government is better poised to control many types of point source discharges that lower groundwater quality, and it should expand existing permit programs to take on this task. The federal government is also better able to undertake the needed regulation of the production, handling, use, and disposal of potential harmful pollutants. Finally, the federal government can provide research and technical aid, as well as a generous flow of money.[6] The states, on the other

2. Getches, *Groundwater Quality Protection: Setting a National Goal for State and Federal Programs*, 65 Chi.-Kent L. Rev. 390 (1989).

3. I set aside one other shell, the ocean, which might well be the end of the line for at least some forms of pollution.

4. Getches, *supra*, note 2, at 413-27.

5. *Id.* at 387-88.

6. *Id.* at 414-18, 424-27.

side, are better able to determine how best to protect local aquifers and water supplies, and should largely be left to do so.[7] The states should decide what level of protection is appropriate, and should determine what mix of methods should be used to bring about that protection.[8] Land use controls, landfill siting criteria, agricultural practice restraints, septic and storage tank limits, surface impoundment rules, factory siting procedures—these and other tools can help in various settings. No new federal agency is needed, he tells us, nor is there need even for any major new federal regulatory program.[9]

The issue that Getches addresses, to rephrase it a bit, is whether there should be more or less state control in this pollution setting than in others. The dominant federal practice so far has been to develop national standards and allow the states an opportunity to implement them. Getches contends that the nature of groundwater pollution calls for greater state leadership. The states should largely determine the standards as well as administer them, although with plenty of federal background aid.

Not the least of the strengths of Getches' article is that he reaches this conclusion entirely for natural rather than political reasons. Our air moves freely among all states, as does our surface water, given time. In the case of groundwater the problems often are more localized and the causes more numerous and varied. More flexibility is needed to deal with the problem effectively, he tells us, and the nature of the problem should determine the nature of the response.[10] Groundwater control is very closely linked with traditional state and local issues like zoning, landfill siting, and water allocation, and cannot be dealt with adequately apart from these concerns. In other words, the physical world and the ways that we use it—rather than politics—should determine how we deal with a local problem like groundwater pollution.

For reasons that will be a bit more apparent by the end of this comment, I am inclined to agree with Professor Getches on this point, and to do so even though many states have so far shown little initiative on groundwater. In the summer of 1989, the federal deadline passed for states to submit to the EPA draft plans for the protection of wellhead areas. Twenty-seven states submitted drafts, and many of the drafts were incomplete. The EPA, nonetheless, was ecstatic with the response—a fact that tells us something about the states, the EPA, and, indeed, the

7. *Id.* at 421.
8. *Id.* at 422.
9. *Id.* at 418.
10. *Id.* at 413-14.

whole posture of pollution control these days.[11] An additional problem with state leadership is that many aquifers cross state lines, and others have recharge areas that are far distant, if not unlocatable. Even more than the federal government, states and local governments tend to react, not act, and in dealing with groundwater pollution the one who reacts is in trouble. Toxic leachates often take decades to infiltrate drinking water supplies and to reach surface lakes and streams; by then the problem is nearly irreversible.

State and local leadership on this issue is very much needed, for so many aspects of the solution are local ones. Groundwater pollution control, like recycling, needs a strong popular base; it must become a local cause célèbre. Local communities must realize that they and their activities are the biggest causes of the problem, that they must undertake to solve it, and that the benefits will be theirs to enjoy. Large corporate polluters have shown remarkable power to push the federal government around, even when some eighty to ninety percent of the American people want tougher environmental laws. What the corporations have not been able to do is overcome the NIMBY syndrome, and they regularly wilt in the face of the angry neighborhood group. If an environmental problem can be addressed locally it should be, for that is where the people speak and act most directly.

For this reason the state level may be too high and distant for some aspects of the solution, and the states as much as the federal government must be prepared to empower those beneath them with the information and resources that they need. Indeed, we should move even further down the hierarchy and say that elected local officials at times should yield to the angriest of neighbors. Our regulatory schemes will need remedial causes of action that any interested group can employ. Until we can fill in the regulatory details we might simply create a generic action for an injunction (and legal fees) against anyone who unfairly and unreasonably pollutes groundwater anywhere. Flexible power is needed at all levels.

But as we are recognizing the need for state, local, and even private action in protecting particular aquifers, we must also realize that the most effective solution—the only effective solution—will require something other than just deciding which back yard to use as a dump. The solution is going to require broad changes in the fundamental ways that we make use of our natural surroundings. Even after we have given state

11. *EPA Receives Plans from 27 States Setting Up Wellhead Protection Areas*, 20 Env't Rep. (BNA) No. 10, at 513 (July 7, 1989).

and local governments as much power as they can handle, there will remain a need for more federal regulation, and the need will be great.

## II.

Groundwater today is in many ways the end of the line for our pollutants, particularly heavy metals and synthetic organic compounds that we cast off so freely. What we release into the air and into surface streams often ends up in our groundwater. Agricultural chemicals and the contents of surface impoundments often end up there, as do the contents of landfills and injection wells. Mining practices, wetlands filling, irrigation, water allocation, and simple land use practices generally—all are part of an immense, interrelated problem. With the problem so vast the solution must be equally vast. Somehow, in some way, groundwater quality must be a concern of each governmental entity, from the local park district, zoning board, health department, sewage treatment center, and solid waste disposal board all the way up to the Defense Department and White House. No single agency can take on this task, and it would be a mistake to suggest to people that it could. Putting a space station in orbit is a task that we can delegate to one agency; groundwater pollution control is not.

With plenty of work for all of us to do it makes little sense to spend time on turf battles. The principal risk is inaction, not duplication and inconsistent rules, and there are forces no doubt that will use jurisdictional issues as tactics of delay. If overlapping rules become a problem, they can be dealt with. In the interim, power should go to those who will exercise it.

Because of this same risk of inaction, we should be suspicious of arguments over the ultimate goal that we must declare, whether it be nondegradation of all groundwater supplies or some system of graded quality levels for aquifers. However important the issue may be in the long run, its near-term significance is minimal, and time spent on this issue will also largely be wasted. Goals Congress has set for clean air and clean surface water have become such jokes that further grandiose goals seem almost silly. Our goal should simply be to protect the quality of groundwater supplies, particularly water that people drink, as best we can and as soon as we can. When we have progress to point to, we can think and talk more grandly.

Even centralized control of all federal efforts is perhaps less important than we might think. A central clearinghouse for information and suggestions would prove helpful for those who seek aid. Moreover, cen-

tralized research banks can reduce duplicated efforts. But groundwater quality must be a concern of many federal agencies, and troubles will only increase if it is not. If groundwater is not a concern of the Department of Agriculture, its many programs are likely to exacerbate the problem. The Department of Energy must take a lead, along with elements of the Department of the Interior. When one central agency is given responsibility it is simply too easy for all others to assume that they can ignore the problem. Plenty of work exists to engage the efforts of all who are prepared to help.

## III.

Groundwater quality is a particularly intractable problem because information is so difficult to obtain. We can guess the movement of groundwater only by knowing immense amounts about the nature of underground formations. Gathering this information is costly, and in the end we can never know all we would need to know. We can only guess whether pollution at one level will infiltrate drinking water supplies at another. Perhaps the rock layer that separates two water levels is truly impermeable. But an earth tremor could change that today, and we might find out tomorrow that the pollution has been moving all along through the separating layer, one foot a year, and that our water supply is now ruined.

In dealing with the natural world our ignorance is great. As we learn more about ecology and the interrelationship of all things we begin to understand Aldo Leopold's lament: the penalty of an ecological education is that we soon realize we are living in a world of wounds.[12] The more we learn the more we realize how ignorant we once were and how carelessly we once acted, and the learning process seems to have no end. Once we realize our ignorance we have two choices: we can either act like we know everything and base decisions entirely on what we know, or we can embrace our considerable ignorance and somehow hedge against our inevitable mistakes.[13]

When we deal with groundwater issues our ignorance is particularly great, which means that our need to hedge our bets is acute. In truth we cannot put anything dangerous in the ground with full confidence that it will not sometime cause us or our world grave harm. For this reason we must be cautious in focusing too much of our effort on protecting drink-

12. A. LEOPOLD, A SAND COUNTY ALMANAC WITH ESSAYS ON CONSERVATION FROM ROUND RIVER 197 (1966).

13. This idea is developed in W. BERRY, HOME ECONOMICS 2-5, 54-75 (1987).

ing water supplies and known aquifer recharge areas. We can begin our protective efforts in these spots, but we cannot stop there. At bottom we do not know enough to say that pollution in one spot will not threaten drinking water. Moreover, we do not know what other environmental harm we are causing. Groundwater is often linked with surface lakes and streams, and even deeply injected pollutants can end up back in our lakes, in our fish, and on our dinner plates. For those among us whose moral ken stretches beyond humankind, the dangers are even more patent.

The problem that we face was well presented in a recent movie, "The Gods Must Be Crazy," which featured a tribesman from the Kalahari Desert who undertook to deal with a soft drink bottle tossed from a high-flying airplane. The bottle caused turmoil within the tribe, and the tribesman sought to get rid of it. His effort to throw it back into the sky did not work, nor did his effort to bury it. His only solution was to throw the thing off the edge of the Earth—to throw it "away," as we would say. The further he walked in search of the edge, the more trouble he encountered.

Like the Kalahari bushman we too are having trouble finding the elusive "away" where we can throw things and forget about them. If the air is not the place, and surface waters are not the place, and the ground is not the place, then where is it? The answer, of course, is that there is no "away" anymore, at least no place that is clearly safe. The solution that stares us in the face, and has long been doing so, is to complete the product circle. We must reuse all that we can and recycle what we cannot reuse directly. What we cannot recycle we must transform back into natural, harmless components, before we try to dispose.

So long as the ground was our "away" we could clean up the air and surface water by putting our pollution there. But when the ground is no longer "away," when the last shell is turned up, the game is over and we can hide our wastes no longer. Perhaps it was inevitable that we would wait until the end to pick up the shell representing the ground, for things in the ground are most easily forgotten. Unfortunately, clean-up costs in this setting can be staggering: Scrubbing crude oil off beaches can be child's play in comparison.

Once we have turned up all the shells we realize that the only sane approach is to do all we can to avoid generating our pollution to begin with, and that takes us back to the source. It is irrelevant whether the pollution will end up in the air, in our surface water, in our groundwater, or simply embedded in the soil. We would be better off without the pol-

lution, and we should do what we can to avoid generating it. Some will say we need a new ethic to regulate our dealings with the Earth, as indeed we do. Those uncomfortable with ethics-talk can phrase the same point more practically. However we state our need, our task is to decide how we will dispose of a thing before we even make it, and if disposal is going to be a problem, we need to make it differently or even do without.

This brings us back to our federalism issue and to the need for greater federal action. As Professor Getches tells us, the federal government has taken an interest in the manufacture, handling, and disposal of certain obvious pollutants, and has undertaken to ban a few toxins that cause needless environmental harm.[14] The federal government is best situated to deal with issues like these, for the products are generated for a national if not international market. If we are going to limit the ways that certain things can be made, the rules should largely be national in scope. Local governments can decide where pollution can best be placed to reduce aquifer contamination, but the federal government is often better able to help reduce the pollution in the first instance.

Professor Getches would leave this role with the federal government, and with that I agree. My sense, however, is that he understates the importance of this role, for if prevention is the main answer, then this role will be the more important one. Our concern needs to be far broader than just pesticides and known poisons that are used by large businesses. We must be concerned as well about things like car batteries, wood preservatives, computer cleaning compounds, paint cans, plastic containers, oven cleaners, and many other things that flow through all segments of our economy. Before we get to the bottom of this problem we are going to have to be concerned about the manufacture of nearly everything that we make, and we will need to find ways of making them that are more respectful of the Earth. We must be concerned not just about the DDT that the farmer sprays, but the plastic toy that we buy for a child. Both products, once used, will need to go somewhere, and when the shells are all turned up, that somewhere is right here.

Many people at this point will cry out for fear of economic decline and a reversion to some subsistent style of living, and without question some changes will need to be made. But we can go quite far in reducing our wastes simply by making modest substitutions and learning to place affirmative value on the gentle and simple. Our attachment to stark white paper provides a ready example. White paper requires the use of dioxin and other potent bleaches that remove color; "minimum impact,"

14. Getches, *supra* note 2, at 398-402.

cream-colored paper requires no bleaches and is every bit as functional. The sheep rancher should not put out deadly poison to deal with coyotes; she should instead hire a few guard dogs—who are more fun to work with anyway.

Our white paper example helps point to what looks to be a fork that lies in our road. If we all developed an environmental ethic and demanded environmentally safe products, the market would help solve the problem. We would still need to deal with misleading advertising, such as what we are now receiving with respect to "degradable" and "recyclable" plastic bags, but the truth would ultimately get out. This ethic will be slow in developing, however, and in the end it is a staggering learning task to pick up all a consumer would need to know to figure out which products to buy. The alternative approach is for government agencies to begin regulating the production of even simple items and to mandate the development of more environmentally sensitive products like paints and oven cleaners. We can take this route, but if we rely upon it exclusively we will need regulations (and regulatory proceedings) that are numbing in detail.

Like the federal-state choice that Professor Getches so ably casts aside, this choice too is one we can avoid. A new ethic is needed and greater regulation can help develop it. In some cases the federal government may need to ban certain products or to mandate changes in composition and manufacturing. In other instances it might push for better disclosure of contents and hazards so that consumers can more easily learn what they need to learn. The more approaches we try the better, and regulation and ethical thinking must work together and stimulate one another. Regulation may be unneeded in settings where an ethic seems to suffice, and industries that desire to avoid regulation might do well to take the lead in stimulating an ethical demand. In some cases the government can help simply by fostering the market for safer products so that companies that make them can get a better start. The federal government could help reduce groundwater contamination everywhere simply by buying and using more recycled products like oil, paper, and plastics, and thereby increasing market demand.

In the end we must realize that groundwater preservation is a task that needs the attention of all of us, and the more people who get involved the better will be the result. We cannot delegate and forget. Individuals, neighborhoods, communities, businesses, and governmental entities at all levels must get involved. Professor Getches is right to deny that we should choose between federal and state. For much the same reasons we should not choose between state and local or between govern-

ment and business or private and public. There is simply too much to do.